cell; the transverse cubital veins are usually subangulately broken with more or less of a distinct stump of a vein issuing from the angle (the right wing has the third submarginal cell nearly divided into two cells by a spurious cross-vein from the angulation in the second transverse cubitus). Abdomen apparently smooth, impunctate, but with a strong lens the surface exhibits a fine or microscopical reticulation from very fine lines.

Hab. - Haitland, Wis.

Type, No. 3716, U. S. N. M.

This species is allied to A. occidentalis Cr. but is readily distinguished by its smaller size, the color of the wings, by the venation and by the smoothness of the mesonotum. Its resemblance to A. unicolor Say. is only superficial.

The species has been named in honor of Dr. Leuthstrom, father-in-law of Prof. Peckham, in whose garden the species was found.

(2) Plenoculus peckhami n. sp. d. Length 3 to 3.5 mm. Black, closely punctate and clothed with a sparse whitish pubescence, the face from middle of eyes and the clypeus with a dense silvery pubescence. Clypeus with a median ridge and produced into a small conic median tooth at apex. Mandibles black, the basal two-thirds closely opaquely punctate, the apical half smooth, shining. Palpi brown-black. Antennae 13-

jointed, the flagellum gradually incrassated towards tip; the first joint of the flagellum is scarcely as long as the second, the third and fourth a little longer than the second and stouter, the joints beyond to the 13th gradually shortening, joints 7-10 being transverse; the terminal joint is large, conic-ovate, as long as the three preceding united. Metathorax rugulose with two short median carinae in a slight depression just before the posterior face. Wings hyaline, faintly dusky at apical margins, the tegulae, stigma and veins brownblack, the marginal cell is sublanceolate with the extreme apex truncate and with an appendage; the second submarginal cell is triangular, petiolate, the second recurrent nervure entering it a little beyond the middle. Hind tibial spurs and the three basal joints of tarsi, whitish. Abdomen long, ovate, a little longer than the head and thorax united, subopaque, finely punctate, sericeous, except lateral triangular spaces, separated by a grooved line, on second, third and fourth dorsal segments, which are smooth and shining

Hab .- Haitland, Wisconsin.

Type, No. 3717, U. S. N. M.

Quite distinct from all other species described in this genus by Mr. Fox, by the apical median clypeal tooth,

Prof. Peckham informs me this species preys upon a Lygaeid belonging to the genus Pamera.

THE LARVA OF CYDOSIA.

It will be remembered by lepidopterists that the position of the genus *Cydosta* Westw., has been in dispute. In Smith's list of 1891, it appears in a subfamily Cydosiinae of Arctiidae. I have just learned from my friend Mrs. E. M. Swainson that she has discovered the larva in Jamaica, and she sends me some notes on the subject, along with a specimen of the moth. The particular specimen of the moth. The particular spe-

cies sent—the only one known to occur in Jamaica—is C. submutata (Walk.) Ckll., Journ. Inst. Jamaica, 1893, p. 259 (= C. jamaicensis Ckll., Journ. Inst. Jamaica, 1892, p. 135; = C. nobilitella (not Cram.) Butler ex err., P. Z. S., 1878, p. 495). I give the account of the larva in Mrs. Swainson's own words:—"A pretty half looper larva, one inch and a half long, soft velvety black with orange marks all down back and at sides, between these are tiny pale yellow marks, on

the third, fourth and fifth segments are only tiny orange marks, and on the third segment four shining black spines, the fourth and fifth segments have only two spines each, on all the rest of the body are very fine black hairs; face and legs black with orange marks. When quite young the pale yellow marks are white. When touched the larvae curl themselves up and drop to the ground. On June 18th turned to chrysalis in earth; a pretty chestnut brown [chrysalis], short and fat. On June 30th the moth emerged. Food plant 'worm weed.'" (E. M. Swainson.) The food plant mentioned is most likely Spigelia anthelmia L. (Loganiaceae).

The most interesting feature of the larva, as brought out in the above notes, is the development of spines in addition to the hairs. It is to be hoped that a detailed account can be obtained later on.

T. D. A. Cockerell. Mesilla, N. M. July 31, 1897.

BIBLIOGRAPHICAL NOTES. - VIII. *

BY SAMUEL HENSHAW. BIOLOGIA CENTRALI-AMERICANA. - ARA"

CHNIDA ACARIDEA. By Otto Stoll. 1886-93, pp. 21+55, plates 1-21. Trombidium, p. 1-6, pls, 1-4; S sp. nov. Rhyncholophus, p. 6, pl. 4; 3 Actineda, p. 7-8, pl. 5; Tetranychus, p, 8, pl. 6;

Atax, p. 9-11, pls 7-10; i var. nov.

* For VII, see v. 7 p. 425.

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Nesaea, p. 11-13, pls. 10-11;
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Megisthanus, p. 31-34, pls. 18-19; 2 sp , 1sp.
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Celaenopsis, p. 35-37, pls. 16, 19-20; 2 sp.

Pachylaelaps, p. 37-38, pl. 19; 1 var. nov. Holastaspis, p. 39, pl. 20; 1 sp.

Megninia, p. 40-41, pl. 21; I sp. nov. Pterolichus, p. 41-42. pl. 21; I "" "" Proctophyllodes, p. 42-43, pl. 21; I " "

The fifty-five (55) species of Acaridea hitherto described from Mexico and Central America belong to eleven (11) families and twenty-four (24) genera, as follows: -

Trombididae, 2 genera, 9 species. Actinedidae, 1 genus, 1 Tetranychidae, 1 " Hydrachindae, 3 genera, 9 Bdellidae, 1 genus, 1 Eupodidae, 1 " Ixodidae, 4 genera, 13 2 " Oribatidae, Nicoletiellidae, 1 genus, Gamasidae, 5 genera, 12 Sarcoptidae, 3 3

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